

## SU - P1

AGRICULTURE; FOOD; TOBACCO - p.12

Week 9403

Before it is transported to the threshing point, the rick is placed on a section of belt which has been placed on the ground for that purpose. The rick, still on the belt, is loaded onto a rick transporter and taken to the storage and drying point, where it is unloaded, connected to a centrifugal fan and dried before threshing. Weed seeds are also removed on the belt, which saves on subsequent use of herbicides.

**ADVANTAGE** - Reduced crop losses. Bul. 48/30.12.92 (2pp Dwg.No.0/0) N94-018463

★ **ODMA** = P12 94-023811/03 ★ **SU 1784134-A1**  
Thermally-insulated container, e.g. for transporting fruit and vegetables in low ambient temp - has external air feed doser, fans and air flow channels with holes along lower walls

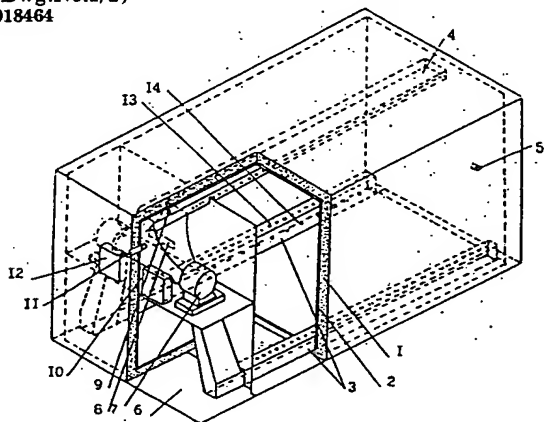
ODESS MARINE FLEET ENG INST 91.02.04 91SU-4929659

Q34 (92.12.30) A01F 25/00 // A01F 25/14, B65D 88/34

The container consists of a thermally-insulated body (1) with an inner lining (2) and a system to ensure the required temperature and humidity conditions, with heaters (8), a temperature sensor (9) and a control unit (10).

The control system also incorporates a doser (11) for feeding outside air into the container, fans (7) and flow channels (3) along the lower side walls. The channels have holes in their top and side walls to ensure a dosed air feed along the sides and lower walls of the container in a ratio of 4:1. The container also incorporates a diagnostic unit, and the inner lining is painted black to prevent the formation of condensation of hoar frost.

**ADVANTAGE** - Increased product storage life. Bul. 48/30.12.92 (4pp Dwg.No.1/2) N94-018464



★ **POAI** P13 94-023812/03 ★ **SU 1784135-A1**  
Procedure for appraising capacity of leguminous plants to produce root nodules - testing and comparing pH value of soil salt extract with range of is haemagglutination activity

POLT AGRIC INST 90.11.05 90SU-4879602

(92.12.30) A01G 7/00

The procedure consists of determining certain agronomical indicators - the pH level of a salt extract from the soil and the range of its haemagglutination activity. These are compared, and a high capacity for forming root nodules is observed where the value of the first indicator falls within the range of values of the second. For example, perennial lupins will display a high capacity to form root nodules when the pH of the soil salt extract is 5.8 and the range of haemagglutination activity is 5.4-7.0.

Experiments with perennial lupins, meadow clover and mellilot displayed the reliability of the procedure.

**ADVANTAGE** - Faster appraisal without damage to plants. Bul. 48/30.12.92 (2pp Dwg.No.0/0) N94-018465

★ **POTA** = P13 94-023813/03 ★ **SU 1784136-A1**  
Potato mini tubers prodn. - comprises micro-clonal propagation of plant, adaptation to non-sterile growth in prescribed modified nutrient medium, cultivation, drying and sepn.

POTATO GROWING SCI PRODN ASSOC 91.01.02 91SU-4909346

C06 D16 (92.12.30) A01G 9/00, A01H 4/00

Potato mini-tubers are produced more efficiently if microclonal propagation of the plant is followed by the adaptation to non-sterile growth using a prescribed nutrient medium.

The medium contains (in mg/l):  $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$  440,  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$  370,  $\text{KH}_2\text{PO}_4$  170, trilon B 37.3,  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  27.8, boric acid 6.2,  $\text{MnSO}_4 \cdot 4\text{H}_2\text{O}$  22.3,  $\text{ZnSO}_4 \cdot 4\text{H}_2\text{O}$  8.6,  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  8.6, KI 0.75, Na molybdate dihydrate 0.25,  $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$  0.25, mesoinositol 100, nicotinamide 2, pyridoxin 1, thiamine 1, Ca pantothenate 10, folic acid 0.5, riboflavin 0.5, biotin 1, cyanocobalamine 0.015,  $\text{NH}_4\text{NO}_3$

800-1000, KN03 1000-1200, indolylacetic acid 1-2, kinetin 0.10-0.20, adeine 0.15-0.25, ferulic acid 0.03-0.07, chlorocholine chloride 80-120, activated charcoal 5-15k, saccharose 30-50k and water the rest. Subsequent planting in soil and cultivation is followed by drying and sepn.

**ADVANTAGE** - Increased efficiency and reduced costs are ensured. Bul 48/30.12.92 (5pp Dwg.No.0/0) N94-018466

★ **RADU** = P13 94-023814/03 ★ **SU 1784137-A1**  
Multi-support crop sprinkler - has nozzles on ends of branch pipes which are in form of two pipes of different lengths adjacent to trolleys

RADUGA IRRIGATION MECHN SCI PRODN ASSOC 90.08.13

90SU-4871408

(92.12.30) A01G 25/09

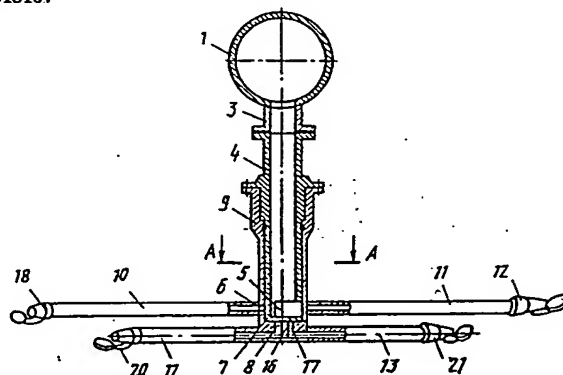
The sprinkler consists of a water feed pipe (1) on self-propelled trolleys, fixed vertical pipes (4) and sprinkler nozzles (18) on the ends of hollow symmetrical branch pipes (10,11) which are linked periodically with ports in the vertical pipes through apertures in a moving cup (4).

Each of the branch units situated adjacent to a trolley is in the form of two pipes (10,11,12,13) of different lengths, situated one above the other. The shorter pipe sections (12,13) are equipped with short-range spray nozzles, and the ports in the vertical pipe are directed towards a central angle which lies symmetrically with the axis of the water pipe and is determined from the length of the trolley and the distance from the trolley to the nozzles' axis of rotation. The longer branch pipe sections (10,11) are connected to the vertical pipe in the zone of a central angle of 360 degrees.

**ADVANTAGE** - Improved performance and lower water consumption. Bul. 48/30.12.92

(3pp Dwg.No.2/3)

N94-018467



★ **RADU** = P13 94-023815/03 ★ **SU 1784138-A1**  
Multi-support circular action crop sprinkler - has additional medium range nozzle on cantilever end section of pipe adjacent to long-range nozzle for reaching into corners of watered area

RADUGA IRRIGATION MECHN SCI PRODN ASSOC 90.10.15

90SU-4874027

(92.12.30) A01G 25/09

The sprinkler consists of a fixed support (1) and a water-feed pipe (7) on self-propelled trolleys (6), equipped with medium-range sprinklers, and a cantilever end section with a long-range nozzle (8) which has a stop-cock (9) with a control chamber linked hydraulically to a setter on the fixed support.

The sprinkler has an additional medium-range nozzle (10) with a stopcock, mounted on the cantilever section of the water feed pipe adjacent to the long-range nozzle, the flow chamber of which is connected hydraulically to the control chamber of the additional nozzle's stopcock.

During operation, by controlling the long-range and additional medium-range nozzles, the sprinkler can be used to water crops in the corners of a square-shaped area, with the long-range nozzle reaching into the corners and the additional medium-range one used along the sides.

